IN THE CLAIMS:

Please **AMEND** the claims as follows:

1. (Currently Amended) A method of producing silicon single crystals which comprises ~~employing, in the step of:~~

pulling up a the silicon single crystal in the Czochralski method, with a cooling rate of not less than 7.3 °C/min in the single crystal temperature range of 1200-1050°C,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value), and the single crystal is not nitrogen doped.

2. (Currently Amended) A method of producing silicon single crystals which comprises ~~employing, in the step of:~~

pulling up a the silicon single crystal in the Czochralski method, with a cooling rate of not less than 7.3°C/min in the single crystal temperature range of 1200-1050°C; and then

cooling the single crystal at a cooling rate of not more than 3.5°C/min in the single crystal temperature range of 1000-700°C,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value), and the single crystal is not nitrogen doped.

3. (Canceled)

4. (Currently Amended) A method of manufacturing epitaxial wafers which comprises ~~allowing:~~

forming an epitaxial layer ~~to grow~~ on the surface of a silicon wafer sliced from a silicon single crystal produced by the Czochralski method ~~by employing~~ with a cooling rate of not less than 7.3 °C/min in the single crystal temperature range of 1200-1050°C ~~in the step of pulling up thereof,~~

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value), and the single crystal is not nitrogen doped.

5. (Currently Amended) A method of manufacturing epitaxial wafers which comprises ~~allowing:~~

forming an epitaxial layer to grow on the surface of a silicon wafer sliced from a silicon single crystal produced by the Czochralski method ~~by employing~~ with a cooling rate of not less than 7.3 °C/min in the single crystal temperature range of 1200-1050°C; and then

cooling the single crystal at a cooling rate of not more than 3.5 °C/min in the single crystal temperature range of 1000-700°C ~~in the step of pulling up thereof,~~

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value), and the single crystal is not nitrogen doped.

6-7. (Canceled)

8. (Currently Amended) A method of producing silicon single crystals which comprises ~~employing,~~ ~~in the step of:~~

pulling up a silicon single crystal doped with 1×10^{12} atoms/cm^3 to 1×10^{14} atoms/cm^3 of nitrogen in the Czochralski method ~~[,]~~;

cooling the silicon single crystal with a cooling rate of not more than 1.2°C/min in the single crystal temperature range of 1000-850°C,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value).

9. (Currently Amended) A method of producing silicon single crystals which comprises ~~employing, in the step of:~~

pulling up a silicon single crystal doped with 1×10^{12} atoms/cm^3 to 1×10^{14} atoms/cm^3 of nitrogen in the Czochralski method, with a cooling rate of not less than 2.7°C/min in the single crystal temperature range of 1150-1020°C; and then

cooling the silicon single crystal at a cooling rate of not more than 1.2°C/min in the single crystal temperature range of 1000-850°C,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value).

10. (Currently Amended) A method of producing silicon single crystals which comprises ~~employing, in the step of:~~

pulling up a silicon single crystal doped with 5×10^{13} atoms/cm^3 to 1×10^{16} atoms/cm^3 of nitrogen in the Czochralski method, with a cooling rate of not less than 6.5°C/min in the single crystal temperature range of 1150-800°C,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value).

11. (Currently Amended) A method of producing silicon single crystals as claimed in any of Claims ~~7 to 10~~ ~~8 to 10~~, wherein the single crystal has an oxygen concentration of not less than 4×10^{17} atoms/cm^3 (ASTM '79).

12. (Canceled)

13. (Currently Amended) A method of manufacturing epitaxial wafers which comprises ~~allowing~~: forming an epitaxial layer to grow on the surface of a silicon wafer sliced from a silicon single crystal doped with 1×10^{12} atoms/cm^3 to 1×10^{14} atoms/cm^3 of nitrogen as produced by the Czochralski method ~~by employing~~; and then

cooling the epitaxial layer with a cooling rate of not more than 1.2°C/min in the single crystal temperature range of 1000-850°C ~~in the step of pulling up thereof~~,

wherein the single crystal has an oxygen concentration of not less than 12×10^{17} atoms/cm^3 (ASTM '79 value).

14. (Currently Amended) A method of manufacturing epitaxial wafers which comprises ~~allowing:~~

forming an epitaxial layer ~~to grow~~ on the surface of a silicon wafer sliced from a silicon single crystal doped with 1 x 10^{12} atoms/cm^3 to 1 x 10^{14} atoms/cm^3 of nitrogen as produced by the Czochralski method by ~~employing~~ with a cooling rate of not less than 2.7°C/min in the single crystal temperature range of 1150-1020°C; and then

cooling the epitaxial layer at a cooling rate of not more than 1.2°C/min in the single crystal temperature range of 1000-850°C ~~in the step of pulling up thereof,~~

wherein the single crystal has an oxygen concentration of not less than 12 x 10^{17} atoms/cm^3 (ASTM '79 value).

15. (Currently Amended) A method of manufacturing epitaxial wafers which comprises ~~allowing:~~

forming an epitaxial layer ~~to grow~~ on the surface of a silicon wafer sliced from a silicon single crystal doped with 5 x 10^{13} atoms/cm^3 to 1 x 10^{16} atoms/cm^3 as produced by the Czochralski method ~~by employing~~ with a cooling rate of not less than 6.5°C/min in the crystal temperature range of 1150-800°C ~~in the step of pulling up thereof,~~

wherein the single crystal has an oxygen concentration of not less than 12 x 10^{17} atoms/cm^3 (ASTM '79 value).

16. (Currently Amended) A method of manufacturing epitaxial wafers as [illegible]d in any of Claims ~~12 to 15~~ 13 to 15, wherein the silicon wafer sliced out has an oxygen concentration [illegible]ot less than 4×10^{17} atoms/cm^3 (ASTM '79).

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